

Anti-MCM2 (phospho S53) antibody [EP4120] ab109133

リコンビナント **RabMAb**

★★★★★ **4 Abreviews** **9 References** 画像数 10

製品の概要

製品名	Anti-MCM2 (phospho S53) antibody [EP4120]
製品の詳細	Rabbit monoclonal [EP4120] to MCM2 (phospho S53)
由来種	Rabbit
アプリケーション	適用あり: Flow Cyt (Intra), WB, IHC-P, ICC/IF 適用なし: Flow Cyt or IP
種交差性	交差種: Mouse, Rat, Human
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
ポジティブ・コントロール	WB: HeLa whole cell lysate (ab150035). IHC-P: Human tonsil tissue. ICC/IF: HeLa cells.
特記事項	<p>This product has switched from a hybridoma to recombinant production method on 9th June 2023.</p> <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none">- High batch-to-batch consistency and reproducibility- Improved sensitivity and specificity- Long-term security of supply- Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p>

製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
バッファー	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 0.05% BSA, 40% Glycerol (glycerin, glycerine), 59% PBS
精製度	Protein A purified
ポリ/モノ	モノクローナル
クローン名	EP4120
アイソタイプ	IgG

アプリケーション

The Abpromise guarantee Abpromise保証は、次のテスト済みアプリケーションにおけるab109133の使用に適用されます
アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

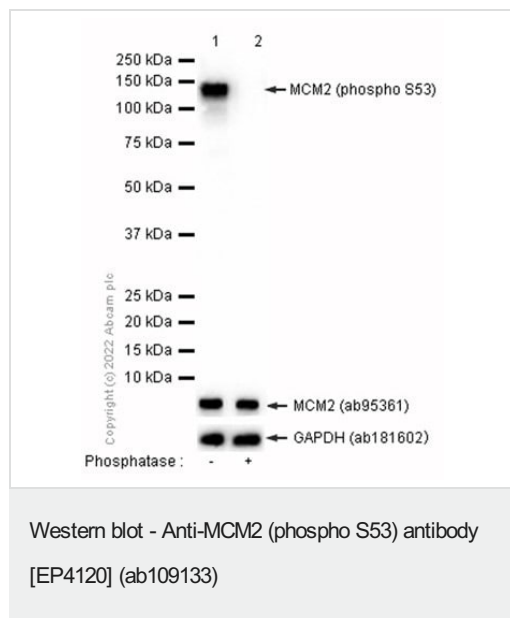
アプリケーション	Abreviews	特記事項
Flow Cyt (Intra)		1/20.
WB	★★★★★ (1)	1/1000.
IHC-P	★★★★★ (2)	1/2400. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.
ICC/IF	★★★★★ (1)	1/50.

追加情報 Is unsuitable for Flow Cyt or IP.

ターゲット情報

機能	Acts as component of the MCM2-7 complex (MCM complex) which is the putative replicative helicase essential for 'once per cell cycle' DNA replication initiation and elongation in eukaryotic cells. The active ATPase sites in the MCM2-7 ring are formed through the interaction surfaces of two neighboring subunits such that a critical structure of a conserved arginine finger motif is provided in trans relative to the ATP-binding site of the Walker A box of the adjacent subunit. The six ATPase active sites, however, are likely to contribute differentially to the complex helicase activity. Required for the entry in S phase and for cell division.
配列類似性	Belongs to the MCM family. Contains 1 MCM domain.
翻訳後修飾	Phosphorylated on Ser-108 by ATR in proliferating cells. Ser-108 proliferation is increased by genotoxic agents. Ser-40 is mediated by the CDC7-DBF4 and CDC7-DBF4B complexes, while Ser-53 phosphorylation is only mediated by the CDC7-DBF4 complex. Phosphorylation by the CDC7-DBF4 complex during G1/S phase is required for the initiation of DNA replication.
細胞内局在	Nucleus.

画像



All lanes : Anti-MCM2 (phospho S53) antibody [EP4120] (ab109133) at 1/10000 dilution

Lane 1 : HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate at 15 µg

Lane 2 : HeLa whole cell lysate, then the membrane treated with Alkaline Phosphatase for 1 hour

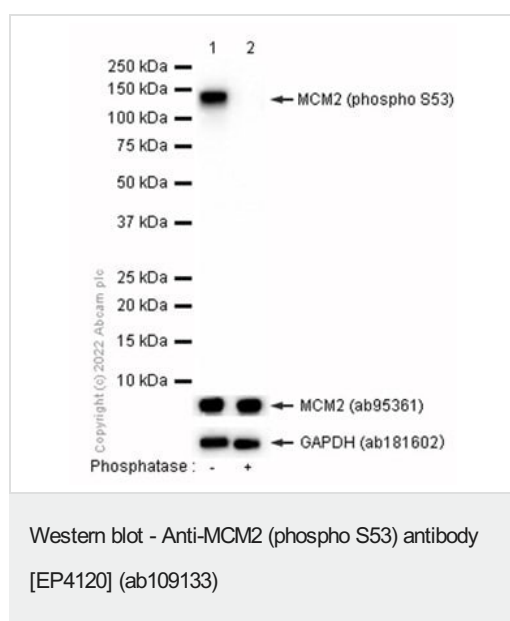
Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/20000 dilution

Observed band size: 130 kDa

Exposure time: 10 seconds

Blocking and diluting buffer and concentration: 5% NFDM/TBST.



All lanes : Anti-MCM2 (phospho S53) antibody [EP4120] (ab109133) at 1/10000 dilution

Lane 1 : NIH/3T3 (Mouse embryonic fibroblast) whole cell lysate at 15 µg

Lane 2 : NIH/3T3 whole cell lysate, then the membrane treated with Alkaline Phosphatase for 1 hour

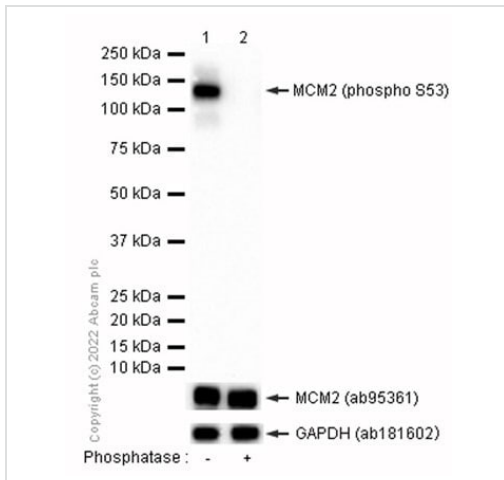
Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/20000 dilution

Observed band size: 130 kDa

Exposure time: 10 seconds

Blocking and diluting buffer and concentration: 5% NFDM/TBST.



Western blot - Anti-MCM2 (phospho S53) antibody [EP4120] (ab109133)

All lanes : Anti-MCM2 (phospho S53) antibody [EP4120] (ab109133) at 1/10000 dilution

Lane 1 : C6 (Rat glial tumor glial cell) whole cell lysate at 15 µg

Lane 2 : C6 whole cell lysate, then the membrane treated with Alkaline Phosphatase for 1 hour

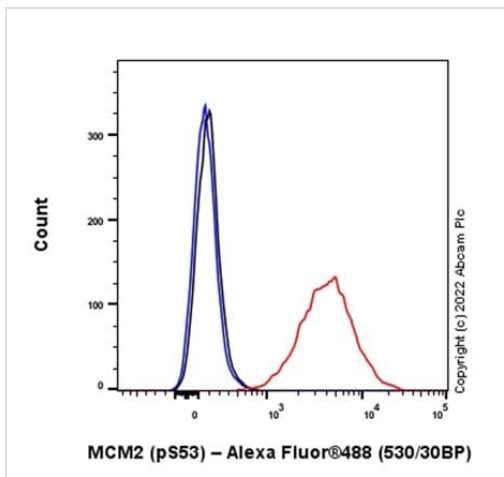
Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/20000 dilution

Observed band size: 130 kDa

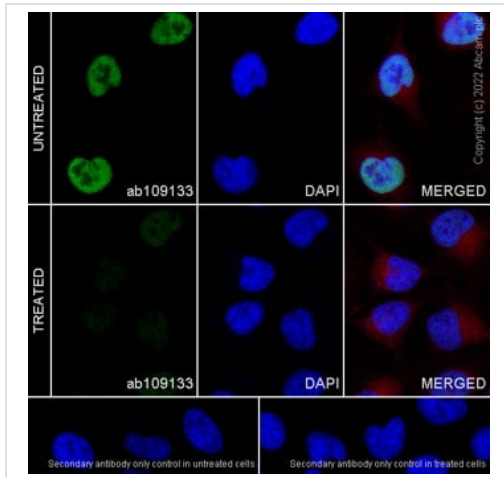
Exposure time: 60 seconds

Blocking and diluting buffer and concentration: 5% NFDM/TBST.



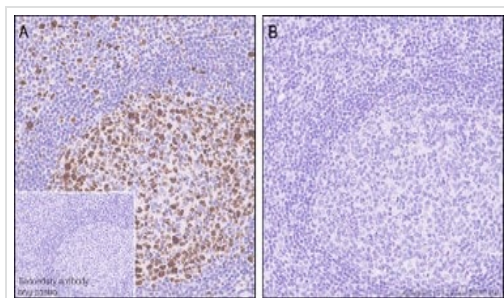
Flow Cytometry (Intracellular) - Anti-MCM2 (phospho S53) antibody [EP4120] (ab109133)

Flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized HeLa cells labelling MCM2 with ab109133 at 1/50 dilution (Red) compared with an isotype control (Black) and an unlabelled control (Cell without incubation with primary antibody and secondary antibody (Blue)). A Goat Anti-Rabbit IgG (Alexa Fluor® 488, [ab150081](#)) was used as the secondary antibody.



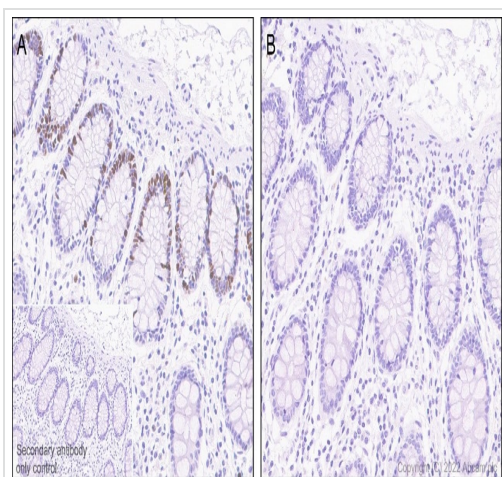
Immunocytochemistry/ Immunofluorescence - Anti-MCM2 (phospho S53) antibody [EP4120] (ab109133)

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized HeLa cells labelling MCM2 with ab109133 at 1/50 dilution. Confocal image showing cytoplasmic and membranous staining in subsets of HeLa cells. [ab195889](#) AlexaFluor® 594-conjugated Anti-alpha Tubulin was used to counterstain tubulin at 1/200 dilution. The Nuclear counterstain was DAPI (Blue). Secondary antibody only control: Secondary antibody is [ab150081](#) Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 dilution.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MCM2 (phospho S53) antibody [EP4120] (ab109133)

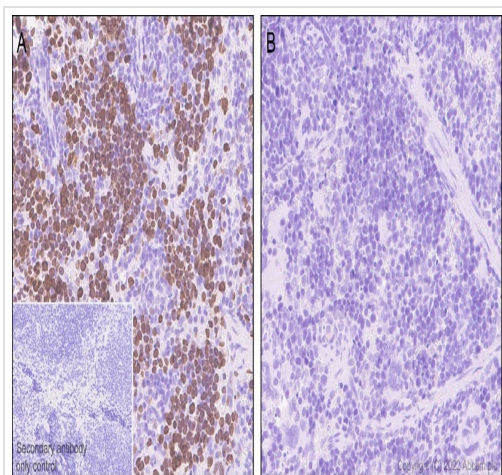
Immunohistochemical analysis of paraffin-embedded Human tonsil tissue labelling MCM2 with ab109133 at 1/2400 dilution, followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Positive staining on Human tonsil tissue without alkaline phosphatase treatment (A) compared to no signal detected when treated with alkaline phosphatase (B). The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, epitope retrieval Solution2) for 30 mins. Counterstained with hematoxylin.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MCM2 (phospho S53) antibody [EP4120] (ab109133)

Immunohistochemical analysis of paraffin-embedded Human colon tissue labelling MCM2 with ab109133 at 1/2400 dilution, followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Positive staining on Human colon tissue without alkaline phosphatase treatment (A) compared to no signal detected when treated with alkaline phosphatase (B). The immunostaining was performed on a Leica Biosystems BOND® RX instrument.

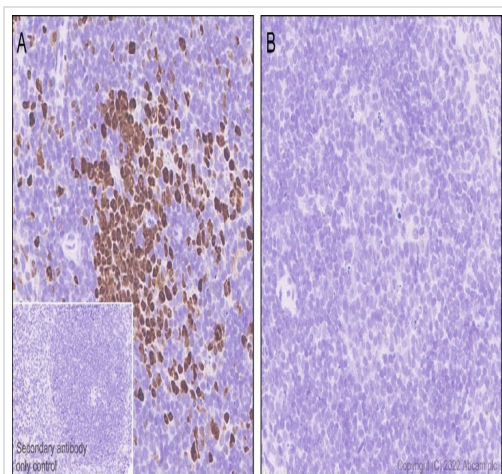
Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, epitope retrieval Solution2) for 30 mins. Counterstained with hematoxylin.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MCM2 (phospho S53) antibody [EP4120] (ab109133)

Immunohistochemical analysis of paraffin-embedded Mouse spleen tissue labelling MCM2 with ab109133 at 1/2400 dilution, followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Positive staining on Mouse spleen tissue without alkaline phosphatase treatment (A) compared to no signal detected when treated with alkaline phosphatase (B). The immunostaining was performed on a Leica Biosystems BOND® RX instrument.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, epitope retrieval Solution2) for 30 mins. Counterstained with hematoxylin.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MCM2 (phospho S53) antibody [EP4120] (ab109133)

Immunohistochemical analysis of paraffin-embedded Rat spleen tissue labelling MCM2 with ab109133 at 1/2400 dilution, followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Positive staining on Rat spleen tissue without alkaline phosphatase treatment (A) compared to no signal detected when treated with alkaline phosphatase (B). The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, epitope retrieval Solution2) for 30 mins. Counterstained with hematoxylin.

Why choose a recombinant antibody?



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Consistent and reproducible results



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Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-MCM2 (phospho S53) antibody [EP4120] (ab109133)

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